

MODEL 9260

34Vp-p Differential / Dual Channel Signal Amplifier



- 45MHz bandwidth
- High amplitude to 34Vp-p into 50
- High output current drive to 1A
- Fast transition time of <10ns
- Low distortion
- Custom Configuration of:
 - Gain
 - Input impedance
 - Output configuration

The 9260 is a bench-top, 2U, half 19" rack size, fully metal case, dual channel DC coupled wideband amplifier designed for high frequency, high current, signal amplification. With a high bandwidth of 45MHz, 34Vp-p into 50 ohms and up to 10W output power, the 9260 is the ideal complimentary amplifier to any signal source that needs a supporting power boost for demanding applications.

High Current High Power

With a peak output current of 1A the 9260 enables a continuous power output of up to 10W, making it ideal for various pulse applications.

Instrument Configuration

The 9260 can be configured to be used as two, single-ended independent channels, or as a one input with two differential outputs. The 9260's standard configuration enables a maximum output voltage of 34Vp-p into 50 ohms with a gain of x10. Other custom gain, such as x15 can be ordered at the time of the purchase, enabling clients' even wider variety of choices to solve their application.

Output Characteristics

The outputs are located on the front panel. There are two outputs, one for each channel. When the 9260 is configured as two separate amplifiers, the outputs generate amplified signals within the range of 34Vp-p into matching load impedance at approximately 45MHz bandwidth.

Input Characteristics

The inputs to the amplifiers can be configured to match different source impedances such as 50 , 75 , or 1M . There are three inputs for each channel:

1. Main input. This input is located on the front panel and is normally used for signal inputs.
2. Auxiliary input. This input is located on the rear panel and can be used as a summing input.
3. DC Offset input. This input is also located on the rear panel and can be used for offsetting the signal level within the specified output level window.

Auxiliaries

The 9260 has two additional inputs for each channel allowing summation of two signals and providing an external control of DC level offset. These inputs are accessible from the rear panel only.

Target Applications

While target applications include piezo-electronics, transducer characterization, MEMS, general electronics and scientific applications, the new 9260 is an ideal solution for virtually any wide bandwidth application that requires high voltage and high current amplification.

MODEL 9260

34Vp-p Differential / Dual Channel Signal Amplifier

Specification

CONFIGURATION

Channels: 2 with single-ended outputs; 1 with differential output

INPUT CHARACTERISTICS

MAIN INPUT

Connector: Front panel BNCs
Impedance: 50 , 75 or 1M
Coupling: DC or AC
Damage Level: 12Vp-p (-6V to +6V peaks)
Differential Mode Accuracy: 4%

INPUT AUXILIARY CHARACTERISTICS

Connector: Rear panel BNC
Impedance: 50
Coupling: DC
Damage Level: 12Vp-p (-6V to +6V peaks)

OFFSET AUXILIARY CHARACTERISTICS

Connector: Rear panel BNC
Impedance: 10k
Coupling: DC
Damage Level: ±2V
Accuracy: 7%

OUTPUT CHARACTERISTICS

GENERAL

Connector: Front panel BNC
Source Impedance: 0Ω
Coupling: DC or AC
Protection: Short-circuit & Thermal protection
Gain (50 load): x10⁽²⁾, fixed
Polarity: Normal
Amplitude: 34Vp-p into matching impedance

Max. Output Current: 1A

SQUARE WAVE CHARACTERISTICS

Transition Time: <10ns (typ.)
Aberrations: <10%

SINE WAVE CHARACTERISTICS

Bandwidth (-3dB): 45MHz (typ.)
Frequency Range: DC to 45MHz
Harmonics Distortion (typ.): 10Vp-p 25Vp-p

1MHz	<-65dBc	<-54dBc
10MHz	<-50dBc	<-45dBc
30MHz	<-38dBc	<-30dBc

GENERAL

Voltage Range: 85VAC to 265VAC
Frequency Range: 47Hz to 63Hz
Power Consumption: 25W
Signal Ground: Grounded to case ground
Dimensions:
 With Feet 315 x 102 x 395 mm (WxHxD)
 Without Feet 315 x 88 x 395 mm (WxHxD)
Weight:
 Without Package 3.5kg
 Shipping Weight 4kg
Temperature:
 Operating 0°C to 50°C
 Storage -40°C to 70°C
Humidity: 80% RH, non condensing
Safety: CE Marked, IEC61010-1
Calibration: 1 year
Warranty^(*): 3 years standard

ORDERING INFORMATION

34Vp-p Differential / Dual-Channel Signal Amplifier

MODEL 9260-10-50-D-S(1)

Gain: 10, 15 or 20, fixed⁽²⁾
Input Impedance: 50 = 50Ω
 75 = 75Ω
 1M = 1MΩ
Coupling: D = DC
 A = AC
Output Configuration: S = Two separated channels
 D = Single channel with differential outputs⁽³⁾

(1) Standard Configuration

(2) Custom gain from x10 to x20 can be ordered however, bandwidth may change.

(3) Selectable by switch.

(4) Specification is given for the standard configuration only

(*) Standard warranty in India is 1 year.